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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/821,865	04/12/2004	Jussi Ruutu	59643.00404	1848

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EXAMINER	
TRINH, TAN H	
ART UNIT	**PAPER NUMBER**
2618	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/821,865	RUUTU ET AL.	
	Examiner	Art Unit	
	TAN TRINH	2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 April 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-33* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3 and 6-33* is/are rejected.

7)☒ Claim(s) *4 and 5* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *12 April 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement (IDS) submitted on 09-01-2005, the information disclosure statement has been considered by the examiner.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-2, 6-12, 14-33 are rejected under 35 U.S.C. 102(e) as being anticipated by Krasner (U.S. Pub. No. 2007/0123248).

Regarding claims 1, 16, 18 and 32-33, Krasner teaches a method for providing time information (see fig. 5A, page 3, section [0035]), the method comprises the steps of: sending time information to at least one communications device (50) (see fig. 5A, step 201, BS transmits time markers to MS, page 3, sections [0028-0029] and page 4, section [0037]); and receiving information indicating an error in a received time information from at least one of the at least one communications device (50) (see fig. 5A, step 207, MS 50 transmits to BS with GPS time associated with the time marker, page 4, section [0037]), the error in the received time information having been determined in a communications device (see fig. 5A-B, and page 4,

sections [0036-0038] and page 5-6, sections [0049-0050]). In this case, the MS 50 is received time makers (time information) from BS, and determines its position contemporaneously with time tagging the makers in the cellular signal, and tagging of the time marker respect to GPS time, the time makers is error or need to update, and then send the message time indication to BS, BS received the message and update the current time clock at base station (BS)).

Regarding claims 2 and 17, Krasner teaches further comprising the step of estimating a transfer delay for transferring the time information to a communications device for at least one transfer medium based on the information indicating the error in the received time information from at least one of the at least one communications device (see fig. 1 and 5A-B, page 4, sections [0037-0038] and pages 5-6, sections [0048-0054]). In this case, the transfer medium is GSM protocol or GSM hyper-frame or super-frame.

Regarding claim 6, Krasner teaches the step of compensating for an estimated transfer delay (see page 3, section [0030] and page 6, section [0054]).

Regarding claim 7, Krasner teaches the step of compensating comprises the step of taking into account the estimated transfer delay before-sending the time information (see page 6, sections [0053-0054]). In this case, the measurements with same mobile receiver with the best taking the estimate several days before provide information.

Regarding claim 8, Krasner teaches the step of providing to the at least one communications device information indicating the estimated transfer delay for compensation (see fig. 5A, step 207, MS 50 transmits to BS with GPS time associated with the time marker, page 3, section [0030] and page 4, section [0037], and page 6, sections [0053-0054]).

Regarding claim 9, Krasner teaches the step of estimating the reliability of the time information based on an estimated transfer delay (see page 5, sections [0039 and 0043]).

Regarding claim 10, Krasner teaches the step of sending information indicating an estimated reliability of the time information to at least one communications device (see fig. 1, and 2, the Mobile station 22 or 50, and fig. 5A-B, page 3, sections [0028-0029]). In this case the MS 50 send the time tagged with propagation delay estimates on the BS to update the clock this is an estimated reliability of the time information.

Regarding claim 11, Krasner teaches the time information comprises a reference time for positioning the communications device (see fig. 2, GPS receiver on MS 50 with GPS positioning time reference, page 5, section [0039]).

Regarding claim 12, Krasner teaches the time information is included in location assistance information relating to a positioning system (see fig. 1, location server 24, page 1, section [0006] and page 3, section [0037] and page 4, section [0037). In this case, the GPS and SPS (satellite position system) or the location server, for provide an assistance data.

Regarding claim 14, Krasner teaches the information indicating the error in the received time information is included in a location response message (see page 4, sections 0037-0038]). In this case, the MS send the message to BS with MS position and time tagging of the time maker in response message.

Regarding claim 15, Krasner teaches the step of monitoring network performance based on estimated transfer delays (see page 1, section [0004] and page 2, section [0026]).

Regarding claim 19, Krasner teaches a location server (see fig. 1, location server 24).

Regarding claims 20, 23 and 31, Krasner teaches a communications device (50 or 22) (see fig. 1 and 2), configured to: receive a first time information from a communications system (see fig. 5A-B, step 201, MS received time markers from BS, page 3, sections [0028-0029] and page 4, section [0037]); determine a second time information (M2-M9) with respect to an external time frame (see fig.5A-B, and page 4, sections [0037]). In this case, the MS determine a second time makers (M1-M9), since second time information, that is the second time maker with respect to GPS time (external time frame). determine an error in the first time information based on at least the second time information (see page 4, section [0037] and page 5-6, sections [0049-0050]); and send information indicating the error in the first time information to the communications system (see fig. 5A-B and 6A-B, and page 4, sections [0036-0038]). In this case, the MS 50 is received time makers (time information) from BS, and determines its position

contemporaneously with time tagging the makers in the cellular signal, and tagging of the time marker respect to GPS time, the time makers is error or need to update, and then send the message time indication to BS, BS received the message and update the current time clock at base station (BS)).

Regarding claim 21, Krasner teaches the communications device (50) comprising a receiver for positioning system signals (see fig. 2, GPS receiver 52, page 4-5, section [0035]).

Regarding claim 22, Krasner teaches the communications device (50), the receiver for positioning system signals is a Global Positioning System receiver and the first time information is a reference time for positioning (see fig. 2, GPS receiver 52, page 4-5, section [0035]).

Regarding claim 24, Krasner teaches the step of receiving a first time information is carried out at a first time instance and the step of determining a second time information is carried out at a second time instance (see fig. 6A, the receiving a first or second time information M1-M9, page 4, section [0037]).

Regarding claim 25, Krasner teaches the step of determining a time period between the first time instance and the second time instance (see fig. 6A, page 1, section [0012] for period 3 hours, and page and page 5-6, sections [0049-0052] for short period time).

Regarding claim 26, Krasner teaches the step of determining an error in the first time information further comprises the step of determining the error based on the first time information, the second time information and the time period (see fig. 6A-B, M1-M9, the M1 first time information with the ΔT, see fig. 6B on T9 (nine time) information and the time period on M9= T9=T(M9-M1)+T1, page 4, section [0038]).

Regarding claim 27, Krasner teaches the external time frame is a positioning system time frame (see pages 4-6, sections [0037-0038 and [0048-0052]).

Regarding claim 28, Krasner teaches the first time information is included in a location request message (see page 1-2, section [0012]).

Regarding claim 29, Krasner teaches the information indicating the error is included in a location response message (see page 4, sections 0037-0038]). In this case, the MS send the message to BS with MS position and time tagging of the time maker in response message.

Regarding claim 30, Krasner teaches the first time information is included in location assistance information relating to a positioning system (see fig. 1, with location server 24 and page 3-4, section [0035]).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 3 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krasner (U.S. Pub. No. 2007/0123248) in view of Liu (U.S. Pub. No. 2006/0205436).

Regarding claim 3, Krasner teaches the step of estimating the transfer delay comprises a step for estimating transfer delays for a transfer media (see fig. 1, transfer media TR1-TR3, GSM data, page 2, sections [0014 and 0025-0027]), and page 4, sections [0037-0038] pages 5-6, sections [0048-0054]). But Krasner does not mention the plurality of transfer media.

However, Liu teaches the plurality of transfer media (see fig. 2, page 4, sections [0075-0076] and page 7, sections [0100], and 17, section [0182]). In this case, the plurality of transfer media is SMS, VoIP, GPRS, GSM and SGSN data.

Therefore, it would have been obvious to one of ordinary skill in the art at the time invention was made to modify above teaching of Krasner with Liu, in order to provide statistical information of media communication (see suggested by Liu on page 7, section [0100]).

Regarding claim 13, Krasner teaches the time information is included in a location request message (see page 1, section [0012] and page 3, section [0028-0029] and page 4, section [0037]). In this case, the request for synchronize information and send location information to BS that is obvious the request location request message.

Allowable Subject Matter

6. Claims 4-5 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Reasons for allowance

7. The following is an examiner's statement of reasons for allowance:

Regarding claim 4, Krasner teaches a transfer medium with GSM protocol. However, Krasner or Liu does not mention the selecting a transfer medium for sending the time information from the plurality of transfer media as specified in dependent claim 4.

Regarding claim 5, Krasner teaches a transfer medium with GSM protocol. However, Krasner or Liu does not mention the step of selecting a transfer medium is selected based on at least estimated transfer delays as specified in dependent claim 5.

Conclusion

8. **Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(571) 273-8300, (for Technology Center 2600 only)

Hand-delivered responses should be brought to the Customer Service Window (now located at the ***Randolph Building, 401 Dulany Street, Alexandria, VA 22314).***

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tan Trinh whose telephone number is (571) 272-7888. The examiner can normally be reached on Monday-Friday from 9:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiners supervisor, Anderson, Matthew D., can be reached at (571) 272-4177.

The fax phone number for the organization where this application or proceeding is assigned is **(571) 273-8300**.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the **Technology Center 2600 Customer Service Office** whose telephone number is **(703) 306-0377**.

10. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tan H. Trinh
Division 2618
July 6, 2007

PATENT EXAMINER
TRINH,TAN